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New Claims

1. Screw connection (1) for hinge parts (3, 5), especially of an eyeglass frame, comprising a screw (25) that interconnects the hinge parts that engage one inside the other and that have an upper hinge lobe, a lower hinge lobe, and at least one middle hinge lobe (7, 9, 11), said screw having a screw head (27) and a screw shank (29) that extends through a first through opening (13) in the upper hinge lobe (7) and extends through a second through opening (15) in the middle hinge lobe (11), with a thread permitting the screw shank to be screwed into the lower hinge lobe (9), and comprising a sleeve (33) that surrounds the screw shank (29), has elastic properties, and interacts with the upper and middle hinge lobes (7, 9) when the screw is in a screwed-in state, whereby the diameter (D2) of the second through opening (15) is less than or equal to the diameter (D1) of the first through opening (13), and the screw (25) has at least one bearing surface for the sleeve (33) with at least one engaging surface (32) that is aligned in the direction of movement in which the screw (25) is unscrewed, characterized in that the screw shank (29) has an annular collar (31) that in the screwed-in state is situated in the middle hinge lobe (11; 11A, 11B, 11C).

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2. Screw connection according to Claim 1, characterized in that in the screw shank (29) is provided at least one annular groove (30), which preferably has a circumferential design, in which the sleeve (33) is arranged or in which the sleeve (33) engages with a longitudinal section.
3. Screw connection according to Claim 1 or 2, characterized in that the screw shank (29) has at least one bridge (55) which preferably has a circumferential design and which is at least partially enclosed by the sleeve (33).
4. Screw connection according to one of the preceding claims, characterized in that the annular collar (31) acts as a guide collar.
5. Screw connection according to one of the preceding claims, characterized in that the sleeve (33)—seen crosswise to the longitudinal extension of the screw (25)—is constructed so as to project at least partially over the annular collar (31).
6. Screw connection according to one of the preceding claims, characterized in that the diameter of the screw shank (29) in the region of the annular groove (30) is less than the diameter (D2) of the second through opening (15).
7. Screw connection according to one of the preceding claims, characterized in that in the circumferential surface of the first through opening (13) is provided at least one longitudinal groove (24), running parallel or essentially parallel to the direction of movement in which the screw (25)

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is screwed and unscrewed and protecting the sleeve (33) from twisting.

8. Screw connection according to Claim 7, characterized in that at least two longitudinal grooves (24) of preferably the same size are introduced in the circumferential surface of the first through opening (13), and that the wall segments (45) of the circumferential surface (45) situated between the longitudinal grooves (24) preferably are essentially the same size as the longitudinal grooves (24).

9. Screw connection according to one of the preceding claims, characterized in that the sleeve (33) on its end opposite from the annular collar (31) is constructed to be supported directly on the underside (35) of the screw head (27) or on a cylindrical projection (37).

10. Screw connection according to one of the preceding claims, characterized in that the diameter of the screw head (27) or the diameter of the projection (37) is less than the diameter (D1) of the first through opening (13).

11. Screw connection according to one of the preceding claims, characterized in that the sleeve (33) in the screwed-in state is deformed in such a way that the sleeve material is pressed into the annular space formed between the screw shank (29) and the second through opening (15), and/or into the gap between the screw head (27) and the projection (37), and/or into at least one longitudinal groove (24).

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12. Screw connection according to one of the preceding claims, characterized in that the sleeve (33) has an annular-shaped cross section, and at the end thereof facing toward the screw head (27) optionally has a section that conically tapers in the direction of the thread.
13. Screw connection according to one of the preceding claims, characterized in that the sleeve (33) on its end facing toward the thread is provided with at least one recess (61) for accepting the wall segment (45).
14. Screw connection according to one of the preceding claims, characterized in that the second through opening (15) has an annular-shaped cross section, and at the opening thereof that faces toward the screw head (27) optionally is conically tapered (recess 43').

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